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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,660	05/11/2001	Felix Henry	1807.1616	5109

5514 7590 03/21/2005

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EXAMINER

DASTOURI, MEHRDAD

ART UNIT PAPER NUMBER

2623

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/852,660	Applicant(s) HENRY ET AL.	
	Examiner Mehrdad Dastouri	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment received on 11/17/04 has been entered. Claims 1-32 and 34 remain pending.

Response to Arguments

2. Applicant's arguments filed 11/17/04 have been fully considered but they are not persuasive.

Summary of Applicant's Argument: The "required compressed data size" recited in Claim 1 is a required size for the compressed data, which are considered before coding for transmission error protection. Fei does not show a step of determining the effective size of the compressed data according to this required size for the compressed data before transmission error protection coding.

Examiner's Response: In response to applicant's arguments, the limitation "considered before coding for transmission error protection" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Specification

3. The specification is objected to for attempting to add new disclosure to that originally presented by new amendment to Page 9, Lines 21-23. Specification

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disclosure and drawings define R_T as the "required data size" not the "required size of the compressed file".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fei et al. ("Turbo-codes used for compressed image transmission over frequency selective fading channel") and Liang et al. (5,790,131).

Regarding claims 1 and 14, Fei et al. ("Fei") discloses determining at least one characteristic of the coding mode (Sect. VI; Table 2), determining an effective size of the compressed data according to the required size and the at least one characteristic (Sect. VI; Table 2). Fei indicates adjusting compression ratio according to the effective size (Sect. VI, para. 1) but does not expressly disclose adjusting a compression parameter. However, Liang et al. ("Liang") discloses adjusting at least one compression parameter according to an effective size (Col. 8, lines 32-67, Col. 9, lines 1-6; Figure 1). Fei and Liang are combinable because they are from the same field of endeavor of compression and file size control. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have modified the adjusting of the compression ratio disclosed by Fei to expressly include adjusting at least one compression parameter. The motivation for doing so would have been because it is well known that there are a number of parameters which affect the size of a

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compressed representation generated by a compressor and the fidelity of the data set regenerated by a decompressor (Col. 2, lines 3-35) and it is a routinely utilized methodology in the art.

Regarding claims 2 and 15, the arguments analogous to those presented above for claims 1 and 14 are applicable to claims 2 and 15. Fei discloses compressing the data and coding the compressed data (Figure 1; Sect. V).

Regarding claims 30/1, 30/2, 31/14, and 31/15, the arguments analogous to those presented above for claims 1 and 2 are applicable to claims 30/1, 30/2, 31/14, and 31/15.

Regarding claims 32/1 and 32/2, the arguments analogous to those presented above for claims 1 and 2 are applicable to claims 32/1 and 32/2.

Regarding claim 34, Liang discloses implementing in a computer program and the program executing on a personal computer (Col. 8, lines 32-46). Liang does not expressly disclose the storage medium as a floppy disk or CD-ROM. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide the program on a floppy or CD-ROM. Applicant has not disclosed that the floppy disk or CD-ROM provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the program stored on a hard disk or the claimed floppy disk or CD-ROM because both perform the same function of providing a storage medium for implementing the method and they are well known storage devices routinely utilized in data processing systems. Therefore, it would have been obvious to

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one of ordinary skill in the art to modify Liang to obtain the invention as specified in claim 34.

Regarding claims 3/1, 3/2, 16/14, and 16/15, Fei discloses the required size is determined automatically depending on the fixed bandwidth, signal-to-noise ratio, and delay spread (Sect. V).

Regarding claims 4/1, 4/2, 17/14, and 17/15, Fei discloses the required size is determined according to constraints related to subsequent decoding and decompression of the data (Sect. V).

Regarding claims 5/1, 5/2, 18/14, and 18/15, Fei discloses the coding mode processes the data by groups of predetermined length, and that the at least one characteristic of the coding mode is the predetermined length (Sect. IV; Sect. VI).

Regarding claims 6/1, 6/2, 19/14, and 19/15, Fei discloses that the coding mode is a turbocoding and that the characteristic is an interleaving length of the turbocoding (Sect. IV; Sect. VI).

Regarding claims 7/1, 7/2, 20/14, and 20/15, Fei discloses the coding mode is a convolutional coding (Sect. IV).

Regarding claims 8/1, 8/2, 9/1, 9/2, 10/1, 10/2, 11/1, 11/2, 21/14, 21/15, 22/14, 22/15, 23/14, 23/15, 24/14, and 24/15, Liang discloses there are a number of parameters which affect the size of a compressed representation generation by a compressor and the fidelity of data set regenerated by a decompressor (Col. 2, lines 4-35). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to choose a particular parameter. The parameters provide a means to adjust the compressed data. Therefore, it would have been obvious to one of ordinary skill in

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the art to modify Fei and Liang to obtain the invention as specified in claims 8-11 and 21-24 because it is well known to adjust various parameters depending on the desired degree of accuracy and size of the compressed data.

Regarding claims 12, 13/1, 13/2, 25, 26/14, and 26/15, Fei discloses determining an effective size according to the required size and the coding mode including the interleaving length (Sect. V-VI; Table 2). Fei does not expressly disclose the effective size as an integer multiple of the interleaving length or by rounding the required size. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specify an integer multiple of the S or by rounding R_T because it is a matter of design choice depending on the desired level of image quality and file size.

Regarding claims 27 and 28, Liang discloses using a personal computer including a microprocessor, ROM containing a program for processing the data, and RAM containing registers adapted to record variables modified during the running of the program (Col. 8, lines 32-46).

Regarding claims 29/14 and 29/15, Fei discloses including a decoder and a decompressor device (Figure 1).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mehrdad Dastouri
Primary examiner
Art Unit 2623
March 18, 2005

MEHRDAD DASTOURI
PRIMARY EXAMINER

Mehrdad Dastouri